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Ground Water & Solid Waste Div

Ground Water & Solid Waste Division
Site Response Section
Site Name
Category
May 21, 1993
Initials

Mr. John Seaberg
Hydrogeologist
Minnesota Pollution Control Agency
Site Response Unit
520 Lafayette Road
St. Paul, MN 55155

Re: East Hennepin Avenue Site, 1992 Annual Report

Dear John:

This letter is intended to summarize our March 6, 1993 telephone conversation regarding the MPCA's March 30, 1993 letter to Mr. William Taylor of General Mills, Inc. commenting on the 1992 Annual Report for the East Hennepin Avenue Site in Minneapolis.

Regarding the comment referenced in the letter as Figures 5, 6, 7, 13 and 37, it was agreed that water levels from pumping wells are not representative of piezometric conditions and should not be used to contour head data in the future.

Regarding the comment referenced in the letter as Page 10, Paragraphs 2 and 3, it was agreed that drawdown varies logarithmically from the pumping wells and that this will be rectified in subsequent reports.

Regarding the comment referenced in the letter as Page 12, Paragraph 1, this is a comment of some substance which will need to be addressed in the next Annual Report. I requested and promptly received from you some of the references cited in this comment. These references will be reviewed. It was agreed that the pumping test data will need to be evaluated to quantitatively assess anisotropic conditions. We discussed some ways of using SLAEM to simulate anisotropic conditions. It was agreed that some modifications to the modeling will need to be performed once the anisotropic conditions are quantified. I will discuss with Amal Djerrari and Otto Strack some ways of addressing this. The results of this modeling will be presented in the next Annual Report.

Regarding the comment referenced in the letter as Page 12, Paragraph 2, you apparently were not aware that there was an identified biomicritic layer between the Carimona Member and the Magnolia Member which has generally been regarded as a leaky separating layer between these two units. However, concurred that, from a practical standpoint, it makes no difference whether the vertical anisotropy of the Carimona Member is attributable to this biomicritic

layer or is the result of vertical anisotropy throughout the entire member. SLAEM deals with both situations by applying all of the anisotropy to a leaky layer of specified resistance. It is my understanding that for modeling purposes, a single separating layer in the SLAEM model (as currently modeled) will suffice.

Regarding the comment referenced in the letter as Page 23, Paragraph 3, you recognized that there is likely other TCE sources in the area but point out that no such sources have been identified as contributing to the TCE distribution in the Magnolia Member underneath the East Hennepin Avenue site. While the pattern of TCE distribution in the Magnolia Member is not quite consistent with an on-site source, we will refrain from further speculation unless future data suggests otherwise.

In summary, it was agreed that all of the comments can be addressed in the next Annual Report. Some additional analysis of the Magnolia pumping test data will be necessary and some modifications to the existing SLAEM model will need to be performed. These results will be presented in the next Annual Report.

Please contact me if you have questions or comments.

Sincerely,

Ray W. Wuolo

RWW/kmh
c: William Taylor
Dagmar Romano, MPCA
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The following people received a copy of the attached letter:

Pete Sandberg, Minnesota Pollution Control Agency
Ralph Pribble, Minnesota Pollution Control Agency
Fred Campbell, Minnesota Pollution Control Agency
Gary Eddy, Minnesota Pollution Control Agency
Pat Koshenina, Minnesota Pollution Control Agency